

## Myelin Basic Protein TFA

<b>Cat. No.:</b>	HY-P1821A	
<b>Molecular Formula:</b>	C <sub>62</sub> H <sub>104</sub> F <sub>3</sub> N <sub>21</sub> O <sub>19</sub>	
<b>Molecular Weight:</b>	1504.61	
<b>Sequence Shortening:</b>	QKRPSQRSKYL	QKRPSQRSKYL (TFA salt)
<b>Target:</b>	PKC	
<b>Pathway:</b>	Epigenetics; TGF-beta/Smad	
<b>Storage:</b>	Sealed storage, away from moisture	
	Powder    -80°C    2 years	
	-20°C    1 year	
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	

### SOLVENT & SOLUBILITY

<b>In Vitro</b>	H <sub>2</sub> O : 100 mg/mL (66.46 mM; Need ultrasonic)					
		Solvent Concentration	Mass			
	<b>Preparing Stock Solutions</b>			1 mg	5 mg	10 mg
		1 mM		0.6646 mL	3.3231 mL	6.6462 mL
		5 mM		0.1329 mL	0.6646 mL	1.3292 mL
	10 mM		0.0665 mL	0.3323 mL	0.6646 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (66.46 mM); Clear solution; Need ultrasonic					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Myelin Basic Protein (MHP4-14) TFA, a synthetic peptide comprising residues 4-14 of myelin basic protein, is a very selective PKC substrate ( $K_m=7 \mu\text{M}$ ). Myelin Basic Protein TFA is not phosphorylated by cyclic AMP-dependent protein kinase, casein kinases I and II, Ca <sup>2+</sup> /calmodulin-dependent protein kinase II, or phosphorylase kinase, and can be routinely used for the assay of protein kinase C with low background in the crude tissue extracts <sup>[1][2]</sup> .
<b>In Vitro</b>	Once MBP4-14 is phosphorylated, it is not dephosphorylated by okadaic acid-sensitive phosphatases (protein phosphatases 1, 2A and 3) or other protein phosphatases such as calcineurin and/or PP 2C present in hippocampal homogenates. Therefore, MBP4-14 can be used for PKC assay in crude extracts of neural tissue <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## CUSTOMER VALIDATION

---

- Autophagy. 2020 Oct;16(10):1823-1837.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

---

## REFERENCES

---

- [1]. Farrar YJ, et al. A phosphatase resistant substrate for the assay of protein kinase C in crude tissue extracts. *Biochem Biophys Res Commun.* 1991;180(2):694-701.
- [2]. Yasuda I, et al. A synthetic peptide substrate for selective assay of protein kinase C. *Biochem Biophys Res Commun.* 1990;166(3):1220-1227.
- 

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA